Sand in Sculpture: Creatively Rewilding Ecologies of Health

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Abstract
Through this creative-relational inquiry, we pursue a radically new way of conceptualizing, researching, communicating, and practicing health and health care in contemporary times. We write to reimagine what an alternative paradigm that is at once humane, democratic, accessible, inclusive, generative, and resolutely open to diversity in its many forms might look and feel like. We begin by presenting the script of an autoethnographic film that explores health, creativity, and physical activity through an arts-based approach that incorporates moving image, spoken word, soundscape, music, and song. Next, we offer two responses to the film, which embody emotional and empathetic engagement, relational commitment, moral and ethical sensibility, and careful scholarly reflection to extend and develop our inquiry in innovative interdisciplinary directions. Finally, we draw on recent developments in complexity theory and environmental activism to propose a new way to understand and practice health care within complex ecologies of health.

Keywords
arts-based research, autoethnography, complexity theory, health care, mental health, physical activity

Introduction
A shared student office, University of Bristol, 2001: I am researching physical activity and mental health and I am a little lost. I flick through the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM-IV; American Psychiatric Association, 1994). Across its 886 pages, it lists a total of 410 disorders. On the left-hand page of my A4 notebook, in no particular order, I list the diagnostic categories it presents: “schizophrenia and other related disorders,” “mood disorders,” “depressive disorders,” “bipolar disorders,” and “anxiety disorders” . . . 17 in all. On the right-hand page, I make a list of the categories of physical activity that come to mind: walking, running, swimming, resistance training, martial arts, yoga, cycling, racquet sports, team sports, surfing . . . 15 in all. Existing research suggests that different mental health outcomes are likely from different forms of activity, and that different types of mental ill-health necessitate different interventions. Using colored pens, I draw a line from each category of mental disorder to each category of physical activity. Two hundred fifty-five lines. That means 255 relationships to research and 255 relationships to understand. More, if we consider each of the 410 disorders within DSM-IV’s diagnostic categories. More still if we address specific variations of physical activity in terms of frequency, intensity, and duration. More, many more, if we recognize the individual specificity of the relationship between physical activity and mental health, the likelihood that the nature of the interaction—and therefore any health outcomes—will be unique to each individual.

I began researching physical activity and mental health as a PhD student; my advisor a leading academic in this nascent field (see Fox, 1999). Within 2 years, Kitrina became a collaborator, and “my” work became “our” work. We published our findings as journal articles (e.g., Carless & Douglas, 2008) and a book (Carless & Douglas, 2010), before diversifying the methodologies we employed (e.g., Douglas & Carless, 2014, 2020) and the populations we worked with (e.g., Carless & Douglas, 2017). As our work progressed, the complexities alluded to in the opening vignette did not abate. Rather, they increased. These complexities apply to the qualities of physical activity itself,

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where issues, such as cultural setting, leadership style, ethos and values, and identities and their intersections (e.g., sexuality, race, class, gender, and more) all needed to be recognized as exerting an important influence on outcome. They apply, too, to understandings of the biopsychosocial nature of mental health and ill-health, and of how it blurs across personal, cultural, political, economic, physical, spiritual, biographical, and historical dimensions.

So much research has been done over the past 30 years. So much public money spent. So many findings generated. So many words and numbers published. So many claims made. Yet there is still so much we do not know. And so many people who are still not being helped. Perhaps it is time for a paradigm shift?

We seek a radically new way of conceptualizing, researching, communicating, and practicing physical activity for mental health within contemporary environmental, creative, and health ecologies. We seek a paradigm at once humane, democratic, accessible, inclusive, generative, and resolutely open to diversity in its many forms. In this article, we take some initial steps toward imagining and articulating what this alternative paradigm might look and feel like.

The approach we use is a form of creative-relational inquiry that, as Jonathan Wyatt (2019) writes,

may be conceptualized as inquiry that seeks not to “capture” and hold still, but to find a way, through desire, to do justice to the fluidity of process. Creative-relational inquiry takes up not (only) the common-sense understanding of creative—concepts of making, of “being artistic,” etc.—but the radical, creative opening-up-to-what-may-be, an opening-up within an encounter [that] is not a confrontation with a thing but a relation that is sensed, rather than understood. (p. 45)

Using this approach, we dive headlong into the intimate and subjective territories of the “bodymind” (see Etherington, 2003): activity/inactivity, health/ill-health, trauma/recovery, bio-psycho-social-spiritual environments, and understanding through creative ways of being. We use diverse arts-based research approaches (specifically, songwriting, filmmaking, and storytelling) to “extend beyond the limiting constraints of discursive communication to express meanings that would otherwise be ineffable” (Barone & Eisner, 2012, p. 1).

We structure our inquiry as three Acts. Act 1 presents the script of the film Sand in Sculpture, which explores a personal territory of health, creativity, and physical activity in natural environments through a multimedia approach, incorporating moving image, spoken work, soundscape, music, and song. Alongside a link to view the film on YouTube (Carless, 2022), we provide cues within the text to visual and auditory elements of the film. The film privileges David’s experiences and voices, capitalizing on Daniel Harris’s (2018) contention that video-based research offers “the most affective, primal, and thorough rendering of the complexity of human life” (p. 449). We encourage readers to view the film for the distinct sensory-aesthetic experience it provides.

In Act 2, we offer autoethnographic responses to the film in the voices of two members of our “community of I” (see Carless, 2021). They embody emotional and empathetic engagement, relational commitment, moral and ethical sensibility, and careful scholarly reflection to extend and develop our collaborative inquiry in innovative interdisciplinary directions. Scene 1 features Elyse’s response, offered in the affective immediacy of her first encounter with the film. In Scenes 2 through 6, Jamie reflects upon the ecological interdependence between beings and environments, generating connections and questions that gently nudge the work further. This act thickens our project’s substantive contribution, deepening and expanding the generative insights offered by the film. Inclusion of this act moves our inquiry into the territory of a dialogical narrative analysis which, Arthur Frank (2010) suggests, “considers how stories make human lives good by providing ideals, imagining hopes, providing models of resistance to injustices, and feeding imaginations of how life be not only different but better” (p. 159).

Finally, in Act 3, we draw on recent developments in complexity theory and environmental activism to glimpse a new way forward not only for research and practice in physical activity and mental health, but also for our wider understanding of the complex interrelationships between environment, creativity, and health at personal and societal levels.

Act 1

Sand in Sculpture: An Autoethnographic Film
(Carless, 2022)

We see images of a wintry, sand-blown beach; we hear a softly picked Spanish guitar. Cut to barren coastal track; bracken and gorse; a leaden sky; and a figure walking away from us. A voice begins to speak, close and warm.

I was deeply affected by a collection of papers—titled Walking for Ourselves—given by The Study Group for Self and Qualitative Inquiry in Japan at the 2022 International Conference of Autoethnography (Tsuchimoto et al., 2022). The contributions considered mental health and also touched on suicide. Suicide is a dangerous topic to explore, especially through autoethnography. But it is also a dangerous topic not to explore. Absence, omission, and silence can also be damaging—to both self and other.

When I consider my own experience, mental ill-health seems to manifest primarily in physical form. It was physical symptoms that first led me into psychotherapy. For me, it is not so much that physical and mental health are connected, more that they are one and the same. The dichotomy is false.
For more than 10 years now, the epicenter of my distress has been my hands.

[Close up images of cracked, splitting, swollen, blistered, bleeding hand]

These images are from 2018, when they were at their worst. A personal vision of hell. I find these photographs traumatic to look at. I apologize if you find them difficult too.

[Cut to indistinct monochrome images of slow-moving ocean]

Hands
Holding
Touching
Feeling

The nerve endings that must function perfectly to make this possible
The blood flow that sustains healthy skin cells
Our cells
Which may rest against—or merge with—a another’s

[Cut to a narrow ravine; a figure appears, walking down the ravine]

A physiotherapist may say that this level of damage causes significant psychological and emotional distress. A psychotherapist may say that this level of damage reflects significant psychological and emotional distress. Recently, I have been resonating with Nick Cave’s description of the grief that followed the death of his teenage son: “Mostly,” he said, “I just recall sitting on the back step of the house away from everyone and smoking and feeling the roaring body shock of it, like this alien force was going to burst out the ends of my fucking fingers” (Cave & O’Hagan, 2022, p. 229).

[Alternating images of healthy and damaged hands]

My hands seem to cycle between breakdown and recovery; ease and disease; disability and ability; possibility and impossibility; pain and freedom from pain. At times, it does seem as if an alien force is literally bursting out of my fingers.

[Cut to cliff edge; a figure walks left to right]

When my hands are healthy
I can play guitar
Take pleasure in touch
Carry my surfboard to the beach
Enjoy the feel of water
Lift a heavy weight
Hold another or a book
I can tend my garden

[Cut to view over the cliff edge; a Samaritan’s sign on a safety rail reads “Talk to us” and offers a telephone number]

When my hands are unwell
I cannot
I am unable to live
To do . . . anything
I want it all over
I just want it to end

[Cut to cliff edge; a figure walks right to left]

How can I write of these moments? How can I put this distress into words? It’s too bleak. Too awful. For me. Perhaps for you? I might not come back from this writing-as-inquiry. I risk becoming marooned in pain and hopelessness.

[Cut to barren coastal track; a figure walking toward us]

I need something to keep me moving
Into, out of, and through
Keep walking
Keep swimming
Keep playing
Keep singing
Into, out of, and through

Music is like a conveyor, a tractor even, moving me Into, out of, and through.
A real-life ghost train. Rails, a carriage, and an engine. Into, out of, and through.

Songs allow me to enter traumatic territory. To dwell there for a time, which sometimes is necessary. But to emerge on the other side, into the light. Into, out of, and through.

So long as the player keeps playing. And the singer keeps singing.

[Opening chords of “Sand in Sculpture” 1 picked softly on a Spanish guitar; cut to indistinct monochrome ocean images]

[Sings]

We got to stay here, holding up the sky from falling
Please be near to me
The truth is something more than sand in sculpture
I believe in this

I am living for a breath of air
Keep breathing for a wave of hope
I am hoping for a cleansing rain or a waterfall
Will you not forsake me?
Don’t try to be strong, these forces are beyond comprehension
I know that for sure
Just clear out everything we find to be broken
And sail out the port

I am living for a breath of air
Keep breathing for a wave of hope
I am hoping for a cleansing rain or a waterfall
Will you not forsake me?

[Fade to black]

Act 2
Responses From the “Community of I”

Scene 1: Desert Dawn. I spent deep time with your Sand in Sculpture film today in the early hours of desert dawn—the vastness of the sky, here, feels a mirrored echo of the vastness of the sea, there. My dawn, your dusk. Which is to say, across difference, resonance.

This piece is searing in its images of mental ill-health, David, the somatic tangle of physical/psychological broken(open)ness. The deep fissures in skin, heart, psyche, and soul. The sloughing of dead skins, some petrification of the past. And, at the heart of it, for me, the horrible-absurd irony that the very kinds of engagement with the world that give you life and sustenance are taken away from you—things you touch with your hands, with your dear vulnerable hands—you list them so beautifully: touch another, pick up a surfboard, be in-the-sea, touch a keyboard, strum your guitar (an other whose touch heals you). The way you layer and link together the holistic somatic experience of dis/ease, dis/ability, im/possibility. . . . It is so important and so true.

And then, the counterimages of walking, of grasses waving, of paths curving into/out of sight, through the landscape both bleak and beautiful. The use of that split in the path between the dunes is stunning, the glimpses of you at different points/positions between them in the frame. Always the promise of water, of waves moving—what a gorgeous image: “Hoping for a cleansing rain, or a waterfall . . . Do not forsake me.” And then, of course, all the waves, all water in movement as the guitar speaks and the speaker sings. And, although I don’t see it on screen, your healed/healing hands touching the guitar and the fulfillment of that line, “As long as the player keeps playing and the singer keeps singing.” I feel immersed in possibility—and hope, too, and solace. It’s a full tour journey for a witness—“into, out of, through”—and I think that is really rare in trauma-based autoethnography work. I so appreciate it, and your courage.

I’m very intrigued by the (unspoken) relationship between hands and feet in your lived experience and represented here. As you tell a story of dis/ease and dis/ability, your feet are walking, continuously until the song and water takes over. Your feet touch earth; move into/out/through the frame. In this dark time/tale of hopelessness, your feet do not forsake you, I thought at one point. That gave me hope in a way that lasted.

Scene 2: Beyond Biology. The Concise Oxford English Dictionary defines ecology as that “branch of biology concerned with the relations of organisms to one another and to their physical surroundings” (Soanes & Stevenson, 2004, p. 453). Yes, that makes sense. But it seems to me that what is evoked here—in relation with your film and song, David, and within the theme of a creative ecology—requires significantly extending this definition. As a starting place, biological ecology evokes a sense of connection and connectivity, usefully focusing on the relations between things. But your film, David, problematizes a narrow, biological definition in two ways. First, it problematizes any assumptions that these “things” that-are-being-held-in-relation are self-contained and, second, that they are merely physical.

Air moves in and out of lungs.
Footsteps move through sand.
 Ankles brush against grasses.
Blood flows.
Hands hold, touch, feel.
Waves wash over you . . .

And not just any waves. Not just watery, turbulent waves washing over the physical body, important as those are. Other waves too. Waves just as real in our experience, yet washing through less-materially located parts of the experiencing self. The heart-cry of your song is a testament to the anticipated reality of such waves; the living body reaches out and yearns for them. Waves of hope. Cleansing rains. Waterfalls. Those wash over us sometimes too.

And what about health? Physical health, mental health. You rightly dissolve the boundaries, David. So perhaps it is useful to step back from the categories altogether and instead take a broader approach, imagining, envisioning the living, experiencing body (so much more than the physical body) moving in and through its environment (so much more than that which is materially present; Barnes, 2020, pp. 170–171; Ingold, 2000; Merleau-Ponty, 1945/2012).

I see you walking through the dunes, David.
I hear the crunch of your footsteps.
I see and hear the grasses shaking in the wind.
I sense the cycles of pain and healing.
The ups and downs that lead, unnervingly, to this cliff edge,
With its Samaritans sign.
I do not know how and why Arthur fell to his death. Arthur Cave, Nick Cave’s son. He fell from the cliffs just a few miles from where I live, on the other side of Brighton. I have cycled beneath those cliffs many times with my own sons. My eldest is now fifteen. The age Arthur was when he died. In the wake of Arthur’s death, Nick sits on the back step of his house, away from everyone, smoking, and “feeling the roaring body shock of it, like this alien force was going to burst out the ends of my fucking fingers” (Cave & O’Hagan, 2022, p. 229).

An alien force. Grief so extreme.

Ecology.
The living, experiencing body moves in and through its environment.
It feels forces that are beyond comprehension, seeking to incorporate these into its body schema.
But how can it navigate such forces?
Especially when they bear down upon it with such overwhelming forcefulness?

You reach the edge of the cliff, David. And I am scared. The cycle of pain bursting from your hands. Hands that no longer afford playing, touching, carrying, feeling, lifting, holding, and tending. Yet it feels to me as if greater forces are at play. It is not simply that your hands are preventing you from engaging in living, as if some buoyant self is bubbling up within only to find itself frustrated and imprisoned by the body. But rather, forces beyond comprehension have entangled you—as a living, experiencing body—in such a way that life itself, not just the body, has ground to a halt.

You say,
I cannot.
I am unable to live, to do anything.
I want it all over.
I just want it to end.

What happens when ecology—the relation of self and the environment—goes awry? What happens at the point where the latter appears to be crushing the very life out of the former?

The living body either reaches an endpoint.
Or it responds.

You say,
How can I write of these moments? How can I put this distress into words?

It’s too bleak. Too awful.
For me. And perhaps for you.
I might not come back from this writing for enquiry.
I risk becoming marooned in pain and hopelessness.

And here you point to music. For you, there is something about music, about singing, about the song, something about the process of it all that seems to work against this stasis, the stuck-ness you so fear. The one marooned has no way out, no apparent line of flight or escape, nothing to hold onto that will pull them out of, or move them through, that desperation. Other methods—writing by itself, for instance—don’t help. So there is a fear of engaging with them. But there is something about music, about singing, about the song—and the process of bringing it all into being—that does. What is it about music, particularly as sounded from the human body, that keeps you moving? Or, to layer in another metaphor, and to point toward the living body that reaches out and seeks a way in the world, what is it about music that allows tender roots to be sent down, down through the sand to tap into something—something perhaps already there—that has the life and energy to keep you moving: into, out of, and through?

Scene 3: Entropy. Professor Brian Cox sits in the sand at the edge of a desert, burying his hands and pulling the soft, dry grains together to watch them sink back down into a pile (BBC, 2011). He is, in his own lucid way, explaining the second law of thermodynamics and the theory of entropy to a TV audience that have no background in these things. He begins by encouraging us to think of objects not as single things, but as made up of many constituent parts, such as the individual grains that make up a pile of sand.

“Entropy,” he says, “explains why, left to the mercy of the elements, mortar crumbles, glass shatters and buildings collapse.” The story he is telling is one in which structure and order are, slowly and inevitably, moving toward randomness and disorder.

The pile of sand next to him, he tells us, has high entropy because there are many ways in which its constituent parts (the grains of sand) can be rearranged, whereas the overall shape and structure of the pile remains the same. A sandcastle, on the contrary, has low entropy. Virtually anything that is done to it will mess it up, bringing disorder to its structure. Compared with the pile of sand, there are relatively few ways of rearranging the sand grains without changing the structure. Over time, and due to other forces at play—the wind, the weather, and the sun, for instance—the sandcastle will gradually become less structured and eventually fall to bits. Its level of entropy will increase.

“There’s nothing fundamental in the laws of physics,” Cox goes on to explain,
that says that the wind couldn’t pick up some sand... and deposit it in precisely the shape of a sandcastle. It’s just extremely, extremely unlikely because there are very few ways of organizing this sand so that it looks like a castle. It’s overwhelmingly more likely that when the wind blows the sand around, it will take the low entropy structure (the castle) and turn it into a high entropy structure (the sand pile).

“So,” he concludes, “entropy always increases. Why is that? Because it is overwhelmingly more likely that it will.” Cox extends this law to the limits of the universe. Everything, ultimately, is moving from structure and order to randomness and disorder. Entropy always, ultimately, increases.

Scene 4: Life. But for now—with this vast system of all-pervasive decay—there is something that is moving in the other direction, which is gathering things together (constituent parts, shall we say) and structuring them in particular ways, and often in very complex ways, which is moving high entropy structures to low ones.

In another series, The Wonders of Life, Brian Cox sits by a lake pondering the emergence of life on earth (“What is Life?” 2013). He has already told us something very mysterious about how energy seems to work in the universe, a fact that is summed up, this time, in the first law of thermodynamics. Somewhat counterintuitively to most of us, it appears that the overall level of energy in the universe never changes. “Every single joule of energy in the universe today,” Cox tells us, “was present at the Big Bang 13.7 billion years ago.” Energy is neither created nor destroyed. It simply transforms itself, or is transformed, from one type of energy to another. In other words, it is conserved. In a waterfall, for example, kinetic energy transforms itself into sound energy and heat energy, and other types of energy. But no energy is ever “lost.” It is simply changed and transformed.

So how does this connect to life? Cox tells us that the lake behind him is actually formed in the crater of an ancient volcano and that substances bubbling up from the earth’s core make the water highly acidic. This causes the water to “have” high levels of protons. As this acidic water is connected to or comes into contact with less acidic or alkaline water that “has” lower levels of protons, a flow is set up. The protons flow along the proton gradient. And, most importantly, this flow can be tapped into and used to do things, such as power a small motor (as Cox demonstrates). In fact, more and less acidic fluids come into contact naturally in certain settings, for example, deep ocean vents. And it may be in just such places that life on earth first emerged: the first, basic single-celled organisms that harnessed naturally occurring proton gradients to fuel the processes of life.

And what, exactly, does life do? One thing that life does is to move in the opposite direction to processes of decay and collapse. It moves along another gradient, transforming high entropy structures into low ones. In other words, it works—in its own unique and contextualized way—against the broader, more universal law that entropy always increases.

Scene 5: Grass and Sand. You walk through sand, David. Or, to be more precise, you walk through the dunes, complex structures that are held in place by organic life. Grasses draw on, tap into energy flows that fuel processes by which they craft structure out of their constituent parts, some of these materials drawn in from the sand within which they grow. Grasses gather together materials, materials that would otherwise be shifting toward high entropic states, states of chaos and dispersion rather than structure and form, and they shape these materials into structures with low entropy, not only tender and fragile structures, such as stems and leaves and roots, but also larger fragile structures such as dunes and even larger, complex ecosystems that themselves form the context within which other life forms flourish. A truly creative ecology.

What can we learn from the grasses? And where does the music fit with this?

If we shift the focus away from biology, away from what we do know to what we do not. And if we return to the idea that the living, experiencing body is more than material, that it moves in and through the world in ways that are mysterious and intriguing, and that it seeks out ways for life to carry on (Ingold, 2011, pp. 4–17), which run against disintegration and decay (which, for me, is the turning point of your story, the moment when the figure, having walked left to right, now returns, right to left), then we might also see that somehow we humans—as very particular kinds of life-forms—also have ways by which we are able to tap into sources and energies that fuel the processes of life, life itself being a mysterious, more-than-material thing. For me, this is what it feels like the music, the singing, and the song does for you, David. It allows you to stretch out yourself (your living, experiencing body) in a particular way and to tap into something—so much more than a mere proton gradient—that carries you through. And this is not to say that that “something” allows you to avoid suffering. It does not. Rather, it takes you on an archetypal journey, a rite of passage through the darkness (Turner, 1967, 1969; Van Gennep 1908/1960). Music, singing, and songs allow you “to enter traumatic territory” and “to dwell there for a time, which sometimes is necessary.” But that something that you tap into does not leave you there, marooned—as you so fear—but rather keeps you moving: into, out of, and through; into, out of, and through.

If this is where music takes you. If this is where you—as a living, experiencing body—have learned to reach to access that energy flow that keeps you moving in this way, then what about others? What other ways are there to turn ourselves toward the sun and soak up that which is necessary to keep us moving, into, out of, and through? And I
wonder whether this stretching out, this reaching beyond to orientate ourselves in this particular way, in a way that allows life to carry on, I wonder whether that is what we often refer to as creativity? If so, then it is the creativity of the first single-celled organisms that, tapping into proton gradients, first turned the tide on universal forces of “entropic decay.” It is the creativity of the grasses that continue to grow and hold the dunes in place. It is the creativity that enables each one of us to tap into something that does not deny the forces within which we are entangled, but which carries us into, out of, and through them. It is the creativity of Life.

**Scene 6: Ecology as Connection Beyond “Things”**. Ecology, for me, evokes this sense of connection and connectivity, but beyond the relations of self-contained “things.” In your film, David, you speak of hands holding, touching, and feeling. Connectedness and connectivity. But then you signal other relations that make such connections possible—nerve endings that must function perfectly, blood flowing to sustain healthy skin cells. And, all the while, we have the images of you walking through an environment, the sand dunes, the grasses, the sky, and the sea close to your home. How are you moving through this environment? Is there a two-way flow between those things that are happening within the soft boundaries enfolds by your skin cells and those things that are happening outside this permeable layer? Where is health centered? Where does it emerge?

**Act 3**

**A Creative Rewilding**

One purpose of arts-based research, according to Barone and Eisner (2012), is “the unearthing of questions that have been buried by the answers” as a way of “remaking the social world” (p. 27). Through this, they write, a “sense of dizziness, of disequilibrium” can result as the work “call[s] into question that which has become all-too-familiar” (p. 23). Following Acts 1 and 2, have we left you with a sense of dizziness or disequilibrium? For sure, we have left you with questions. These questions return us to the core focus of our inquiry: What is going on at the intersections of health, environment, and creativity? How do the potentially bidirectional relationships between each of these dimensions affect each other? How might we—as researchers, educators, and practitioners—work differently to better promote health and healing? In Act 3, we articulate an alternative way forward—not only for physical activity and mental health, but also for our understanding and practice regarding the myriad interrelationships that unfold within diverse ecologies of health. To do so, we draw on recent developments in complexity theory and environmental activism.

**Health as a Complex Ecosystem**. In *Notes on Complexity*, Neil Theise (2023) writes, “we are not walking through the world; we are interwoven with it. Everywhere we look, we see complexity. In everything we do, we participate in complexity” (p. 24). Complexity, he suggests, “refers to a class of patterns of interactions [which are] open-ended, evolving, unpredictable, and yet adaptive and self-sustaining” (p. 4). While the application of complexity theory in health care (e.g., Campbell et al., 2000; Greenhalgh & Papoutsi, 2018) and other domains (e.g., Lewin & Regine, 2001) is not new, three properties of complex systems are particularly relevant to the health/environment/creativity ecology we have been exploring.

The first is an **interdependence** between each of the elements that comprise any complex system. This, Theise suggests, “reflects how every element of a complex system is linked to every other element, all parts interacting to compose and influence the emergent whole” (pp. 103–104). In the film, we see this not only across the elements of health evoked (e.g., damaged skin, suicidality) but also across the forms of activity (e.g., walking, surfing), the physical environment (e.g., ocean, dunes), and acts of creativity (e.g., song writing). In other words, interdependence applies not only across diverse dimensions of health, but also potentially across all dimensions of “being human” that are portrayed in the film. Health, then, unfolds within a complex ecosystem, potentially shaping and being shaped by any other dimension of the individual’s habitus and experience.

The second is **emergence**, the unpredictable outcomes that arise through unfolding relationships between the interdependent components of a complex system. Theise again writes, “Even if one knows the characteristics and behaviors of all the individual elements of a living system (a cell, a body, an ecosystem), one cannot predict the extraordinary properties that emerge from their interactions” (p. 4). In the film, emergence is evident at the individual level—for example, through ongoing cycles of brokenness and healing prompted by unknown (or unrecognized) stimuli. Emergence can also be seen at a “meta” or cultural level—through, for example, unpredictable outcomes of support interventions (e.g., psychotherapy, physiotherapy, and the Samaritans).

The third is **creativity** itself; in this sense, the ability to respond to and adapt to unpredictable happenings in original ways. According to Theise (2023),

Neither we nor our universe is machine-like. A machine doesn’t have the option to change its behavior if its environment changes or becomes overwhelming. Complex systems, including human bodies and human societies, can change their behaviors in the face of the unpredictable. That creativity is the essence of complexity. (p. 4)

Writing a song through and as a result of the experiences evoked in the film can be understood as a creative act that
results in the existence of a new, original “thing.” Not only an object (the recording), but also more than an object. At once creative, interdependent, and emergent. The song, in turn, comes to influence David’s subsequent experience and health (e.g., healing, sense of hope). It may be that it also influences the experiences of others as a result of being seen and heard on YouTube. Here, then, a complex system—a particular ecology of health—reaches beyond the individual subject of the film to include others; potentially anyone, anywhere, in fact.

But how might we work within such a complex ecosystem to encourage or promote better outcomes?

**Rewilding the Environment.** In *Rewilding the Sea: How to Save Our Oceans*, Charles Clover (2022) offers a provocative and revolutionary approach to ocean-based environmental activism. Through a series of case studies of successful conservation interventions, Clover proposes a course of action through which biodiversity is enhanced, ecosystems restored, and the overall health of oceans improved. It requires a fundamental rethink. Currently, he writes, “We continue to apply terrestrial thinking to the sea—on land, we may safeguard ‘features,’ like an orchid meadow or an ancient wood—rather than protecting dynamic and interrelated ecosystems for what they are in their entirety” (p. xxiii). The fundamental change he proposes therefore requires a paradigm shift: moving our focus away from specific features to consider instead the health of oceanic ecosystems in their entirety. That is, viewing the ocean as a complex ecosystem rather than a myriad of component parts.

Clover (2022) uses the term *rewilding* to capture the essence of this process. The term, he writes, has been adopted by those who have become, “exasperated by the failings of conventional conservation wisdom. Instead of focusing on managing a feature, like a reef, or a species, such as salmon, rewilding tries to restore whole ecosystems” (p. 13). Clover considers the work of New Zealand environmental activist Bill Balantine, a longtime advocate of “stepping back and letting natural processes restore the sea, any bit of sea, because nature knew far better how to do this than us and would do it in unexpected ways” (p. 13). This contrasts sharply with current environmental policies and practices:

> Officialdom prefers to believe in the serene scientific management of nature by us—which assumes that humans are god-like creatures, devoid of base instincts, who actually know what we are doing. The reality is that we humans are fallible, don’t know everything and are politically influenced, by economic factors and by dogma, and it can take generations to correct our mistakes. (p. 14)

Substitute the word “nature” in this excerpt for the word “health” and we have a potent evocation of contemporary policy and practice within the dominant paradigm of evidence-based medicine. Perhaps we—as health professionals, researchers, educators, and practitioners—might learn something from these recent advances in ocean conservation? Might the concept of rewilding help us develop more effective responses to the multitude of health crises faced in modern societies? If so, what might a rewilding of health ecologies look and feel like? And how may it begin?

**Creatively Rewilding Ecologies of Health.** A necessary starting point, we suggest, is to move away from conceptualizing and treating health as a multitudinous collection of discrete conditions, disorders, illnesses, diagnoses, interventions, and/or treatments and to view it instead as a complex ecosystem predicated on interdependence, emergence, and creativity. What might become possible if we acknowledge that health is—or has become—too complex to be effectively managed as a succession of component parts? If we were to instead take the view that good health equates to the well-being of an entire ecology? A complex ecosystem that incorporates embodiment, emotions, economics, education, culture, mind, spirit, relationships, interconnection, and much more. For Theise (2023), we might very well benefit from a more flexible perspective on the nature of the body than Western science and medicine usually allow. Complementary views of the body as cells, or as a fluid continuum, or even as electromagnetic and quantum fields, may help bridge conceptual or descriptive gaps between Western medicine and other cultures of health and healing. (p. 56)

Clover (2022) describes the phenomenon of “trophic cascade” as a realistic way that seemingly insurmountable change may be initiated. Through a trophic cascade, he writes, “the survival or reintroduction of one or two species alters an entire ecosystem” (p. 15). Clover offers the example of oysters, which have the ability to gather and nurture other species around them. “By reintroducing native oysters,” he writes, “or nurturing the few remaining oysters that are left in places where there are enough of them, one is not just restoring a single species but an entire ecosystem” (p. 85). On this basis, Clover suggests, the native oyster is a keystone species—an organism that helps define an ecosystem—meaning that oyster restoration is “one of the best things you could possibly do if you wanted to rewild the seas around our shores” (p. 85).

How may we initiate a “trophic cascade” within contemporary health ecologies? What might trigger a similarly far-reaching transformation of health and health care to that achieved in oceans by the humble oyster?

A trophic cascade in health care might begin with our stories—our humane, open, vulnerable, surprising, generous, courageous, and generative stories. And it might include our songs, films, images, music, poems, plays, and
artworks. It might extend to incorporate our testimonies, our caring relationships, our hymns, and our communal witnessing of each others’ suffering, healing, and transformations. These kinds of offerings—as Sand in Sculpture demonstrates—have the best chance of recognizing, working with, and capitalizing on the interdependence, emergence, and creativity that are core to the complex ecosystem that is health. While our artworks may remain as humble as an oyster, they can come to be valued as highly as science and technology in protecting, sustaining, and rebuilding health in diverse 21st-century societies. Through the ecological rewilding that they initiate, we will collectively be better able to protect and recover the myriad elements that comprise health and well-being. Perhaps the truth is, after all, something more than sand in sculpture.

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